

distance from gill-opening to vent. Eye a little nearer to angle of mouth than to end of snout; cleft of mouth $\frac{1}{3}$ the length of head or a little less. Coloration uniform.

Three specimens, 300 to 330 mm. in total length, from Lagos and Elobi.

XLIII.—*Notes on Malay Tigers, with Description of a new Form from Bali.* By ERNST SCHWARZ.

IN 1868* Fitzinger described the tiger from Sumatra and Java as “Der Sunda-Tiger” (*Tigris sondaica*). As the Sumatra and Java tigers are subspecifically distinct, Fitzinger’s name can only stand for one of these, and I propose to use it for the Javan race. In 1908 Pocock used Fitzinger’s name for the Sumatran tiger, but he does not appear to have distinguished more than one race of Malay tiger, but simply followed Fitzinger.

In the diagnosis of *Tigris sondaica* Fitzinger describes the stripes as follows:—“fasciis angustis transversalibus parum numerosis.” In a skin of a tiger from Java in the Senckenberg Museum, Frankfurt-a.-M., the stripes are narrow, as described by Fitzinger, whereas in a skin from Deli, Sumatra, in the same collection, and in the specimen described and figured by Pocock † (also Deli, Sumatra), they are “numerous, closely placed, and broad.”

The tiger from Java will therefore have to stand as *Felis tigris sondaica* (Fitzinger).

The following races of Malay tiger can be distinguished:—

Felis tigris, subsp.

Felis tigris, var. *nigra*, Lesson, Nouv. Tabl. R. Anim., Mamm. p. 50 (1842) (Sumatra) (nom. nud.).

Tigris sondaica, Fitzinger (part.), Sitzungsber. k. Akad. Wiss. Wien, math.-nat. Cl. Bd. lviii. i. Abth. p. 454 (1868) (Java).

Felis tigris sondaica, Pocock (part.?), P. Z. S. 1908, ii. pp. 890-893, text-fig. 174 (1908).

Hab. Sumatra.

Specimens examined. 1 ♂ skull, 1 ♀ skin (mounted) with skull. Deli, Sumatra. Senckenberg Museum, Frankfurt-a.-M.

* Sitzungsber. k. Akad. Wiss. Wien, math.-nat. Cl. Bd. lviii. i. Abth. p. 454 (1868).

† P. Z. S. 1908, ii. pp. 890-893, text-fig. 174 (1908).

Ground-colour somewhat paler than in *sondaica*; stripes rather broad, but less so than in *tigris*, and duplicated, especially on the hind-quarters and thighs. Shoulders rather scantily striped. Horizontal stripes on forehead distinct, broad. Back of ears black, with an elliptical white band below the tip and a number of brown hairs at base. Lower portion of face and anterior part of cheek-beard white. The light area above the eyes much larger than in *sondaica*, consisting of a white spot above the anterior angle of the eye and a buffy area above the eye, separated by a black band.

Fur longer and beard more distinct than in *sondaica*.

Skull. Somewhat smaller than in *F. t. sondaica*; zygomatic width markedly less. Occipital plane broad, its upper margin rounded; mastoid process conspicuously projecting laterally. Bullæ more rounded than in *sondaica*; P₄ with better developed metacone and weaker protocone.

This local form of tiger appears to be intermediate between *F. t. sondaica* from Java and the mainland races. It is easily distinguished from *sondaica* by the broad nasals and the shape of the occipital plane.

Felis tigris sondaica (Fitzinger).

Tigris sondaica, Fitzinger (part.), Sitzungsber. k. Akad. Wiss. Wien, math.-nat. Cl. Bd. lviii. i. Abth. p. 454 (1868) (Sumatra).

Hab. Java.

Specimens examined. 1 skin, 3 ♂ skulls, 1 ♀ skull. Java. Senckenberg Museum, Frankfurt-a.-M.

Ground-colour light rusty; stripes very narrow, often duplicated. Less stripes in the shoulder region. Frontal stripes indistinct. Back of ears black except an elliptical white spot below the tip. Lower portion of cheeks white. A very small *whitish* area above the anterior angle of the eye.

Fur short and close.

Skull. Size rather larger. Nasals long and narrow. Occipital plane narrow, its upper margin triangular.

This is the largest of the island tigers. It is distinguished by the shape of the occipital plane.

Felis tigris balica, subsp. n.

Type locality. Bali.

Type. ♀ ad., skin and skull. Senckenberg Museum, Frankfurt-a.-M. No. 2576. Purchased from Dr. J. Elbert.

Specimens examined. One, the type.

Ground-colour somewhat brighter than in *sondaica* and light markings clearer white. Stripes a little broader and more duplicated. Frontal markings indistinct. Back of ears black except an elliptical white spot below the tip. Lower portion of cheeks white. A rather small *white* area above the anterior angle of the eye.

Fur short and close.

Skull. Very small; general plan as in *sondaica*. Nasals long and narrow. Occipital plane narrow, its upper margin triangular. Bullæ of the same general shape as in *sondaica*, but much flatter. P_4 shorter.

Dimensions of type:—Head and body 1530 mm.; tail 580.

Skull: basilar length 207; condylo-basilar length 223; greatest breadth 169; mastoid breadth 100; nasals 86×41.5 ; intertemporal constriction 44; width of brain-case 86; palatilar length 110; palate, greatest breadth (incl. teeth) 102; breadth of rostrum across roots of canines 71; p_4 length on outer edge 30.6, breadth 15.5, greatest oblique diameter 31.5.

The Bali tiger is easily recognized by its very small size. In the shape of its skull it is much like *F. t. sondaica*, but differs in the flatness of the bullæ and the narrower zygomatic arches.

Skull-measurements (in mm.) of Malay Tigers.

Locality.	Age and sex.	Senckb. Mus. No.	Upper length.	Zygomatic breadth.	Nasals.	Breadth of Planum occipitale.
Deli, Sumatra	♂ ad.	2	309	206	101×50.3	65
Sumatra	♀ ad.	1160	270	176	94×50	51.5
Java	♂ ad.	1616	315	220	103×48.7	52.8
Java	♀ ad.	4	290	195	96×47.7	47.2
Bali	♀ ad.	2576	254	169	86×41.5	41.5